

REMARKS

Claims 1, 17, 24, and 26-39 are now pending. Claims 2-3, 14-16, 18-23, 25, and 40 are cancelled. Upon entry of this amendment, the specification and Claims 1, 28, 29, 32, 33, 34, 36 and 37 will be amended and Claim 24 will be cancelled. These amendments are discussed below with respect to particular objections or rejections. No new matter has been added and no new issues have been raised. Entry of this amendment is thus respectfully requested.

Applicants gratefully acknowledge the approval of the drawings and withdrawal of previous objections to the specification and claims as detailed in the current Office Action of 26 November 2003.

Amendments to the Specification

Applicant has submitted a substitute specification in accordance with 37 C.F.R. §1.125(b) and 1.52(e) due to the number of the amendments made to the specification. As to the substitute specification, applicants submit that no new matter is added. Enclosed are a clean version and a marked up version showing all the changes to the specification of record. As required under 37 C.F.R. §1.125(c), the paragraphs of the substitute specification have been numbered. Applicant respectfully requests that the substitute specification be entered.

Applicant respectfully requests that the sequence listing filed in computer-readable form and paper copy on 25 August 2003 be cancelled, and that the sequence listing filed 14 May 2002 be retained.

Applicant has amended the specification as follows to correct inadvertent typographical or clerical errors:

(a) On page 2, line 13 (paragraph [0005]), “enzymes” has been corrected to “enzyme.”

- (b) On page 10, line 15, "cyclyzed" has been corrected to "cyclized."
- (c) On page 54, line 9, "4:45" has been corrected to "4-45."

Applicant has inserted the following amendments into the substitute specification in response to the current Office Action:

- (a) SEQ ID NOs: 1-4 in the sequence listing and their specific reference on page 15 have been canceled. In accordance with the Sequence Listing filed on 14 May 2002, SEQ ID NOs: 1 and 2 once again refer to the DNA and amino acid sequences, respectively, of the *P. shermanii* epimerase.
- (b) The Internet address on page 48, lines 17-18, has been deleted as it comprises nonessential background information.
- (c) The references throughout the specification have been placed into a uniform format, with complete references at each instance. The bibliographic list on pages 90-92 has been deleted as it is now redundant. As such, unused references 1-2 have been deleted. As the references previously listed in the bibliography had each been incorporated by reference by the preceeding paragraph (page 90, lines 5-6), such notation has been appended to the individual references when cited in the text and the paragraph on page 90, lines 5-6, has been deleted.
- (d) The unclear numbers in parentheses on page 55, lines 18 and 20, have been deleted.

In light of the amendments to the specifications, the Applicants respectfully request that the objections to the specification be withdrawn.

Rejections of the Claims

The examiner has rejected pending Claims 1, 17, 24, and 26-39 as allegedly lacking written description under 35 U.S.C. §112, first paragraph, new matter, as failing to comply with the written description requirement. Applicants hereby request cancellation of the sequence listing filed on 25 August 2003 and references to SEQ ID NOs:1-4 in that sequence listing. References to these SEQ ID NOs in Claims 1, 24, 28, 29, 32, 33, 36, and 37 have been deleted. Applicants further respectfully request that the sequence listing filed 14 May, 2002, be retained to provide the DNA and amino acid sequences of the *P. shermanii* epimerase gene as SEQ ID NOs: 1 and 2, respectively. Accordingly, the reference in Claim 1 to SEQ ID NO:5 has been amended to read SEQ ID NO:1.

The examiner has rejected pending Claims 1, 17, and 26-35 as allegedly lacking written description under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The claim language has been amended upon the Examiner's suggestion so that the claimed *E. coli* host cell contains the *mutA* and *mutB* genes from specific organisms, the epimerase gene that is SEQ ID NO:1, and modular PKS genes. As this makes Claims 1 and 24 identical in scope, applicant hereby requests cancellation of Claim 24.

The examiner has rejected pending Claims 1, 17, and 26-35 as allegedly lacking written description under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The claim language has been amended upon the Examiner's suggestion to specify that the gene products intended are proteins.

The examiner has rejected pending Claim 34 as allegedly lacking written description under 35 U.S.C. §112, second paragraph, as being indefinite for failing to

particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The orphan phrase "or a gene" has been deleted.

In light of the above amendments, the Applicants respectfully request that the rejection of Claims 1, 17, 24, and 26-39 under 35 U.S.C. §112, first and second paragraphs, be withdrawn.

Summary

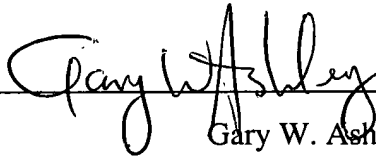
In conclusion, it is respectfully submitted that the claims and specification have been amended such that the objections and rejections are overcome, and the claims are in condition for allowance.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-2544** referencing docket no. 300622004900.

Respectfully submitted,

Dated: 25 May 2004

By: _____



Gary W. Ashley
Reg. No. 51,418
Kosan Biosciences, Inc.
3832 Bay Center Place
Hayward, CA 94545
Phone: (510) 731-5215
Fax: (510) 732-8401